

Study Number: C16019-01
Test Type: TOX - Perinatal DRF
Route: Dosing in Water
Species/Strain: Rat/Harlan Sprague Dawley

PA48: Summary of Tissue Concentration

Test Compound: Thallium (I) Sulfate

CAS Number: 7446-18-6

Date Report Requested: 06/11/2020

Time Report Requested: 06:58:06

Lab: Battelle

Study Number:

C16019-01

Study Gender:

Female

PWG Approval Date

See web page for date of PWG Approval

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F1 Male: PND4 Biosample

Phase	Dose (mg/L)	0	6.25
PND 4	Pup Plasma Thallium Concentration (ng/ml)	0.0958 ± 0.0265 (3)	218 ± 19.3 (3) *
PND 4	Pup RBC Thallium Concentration (ng/ml)	BD	9.90 ± 1.53 (3)

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F1 Female: PND4 Biosample

Phase	Dose (mg/L)	0	6.25
PND 4	Pup Plasma Thallium Concentration (ng/ml)	0.0672 ± 0.0242 (3)	231 ± 24.1 (3) *
PND 4	Pup RBC Thallium Concentration (ng/ml)	BD	10.4 ± 2.13 (3)

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		F1 Male: PND28 Biosample			
Phase	Dose (mg/L)	0	3.13	6.25	12.5
PND 28	Pup Plasma Thallium Concentration (ng/ml)	0.106 ± 0.0282 (5) **	93.6 ± 3.52 (5) **	191 ± 15.1 (5) **	430 ± 26.5 (5) **
PND 28	Pup RBC Thallium Concentration (ng/ml)	BD	4.84 ± 0.317 (5)	8.32 ± 1.25 (5)	12.7 ± 0.431 (5)

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		F1 Female: PND28 Biosample			
Phase	Dose (mg/L)	0	3.13	6.25	12.5
PND 28	Pup Plasma Thallium Concentration (ng/ml)	0.138 ± 0.0129 (5) **	97.5 ± 9.49 (5) **	198 ± 9.25 (5) **	394 ± 26.2 (5) **
PND 28	Pup RBC Thallium Concentration (ng/ml)	BD	5.17 ± 0.249 (5)	8.76 ± 0.972 (5)	11.5 ± 1.02 (5)

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F0 Female: GD18 Biosample

Phase	Dose (mg/L)	0	6.25	25
GD 18	Adult Plasma Thallium Concentration (ng/ml)	0.202 ± 0.0791 (3) **	212 ± 14 (3) *	1080 ± 62.4 (3) **
GD 18	Adult RBC Thallium Concentration (ng/ml)	BD	19.3 ± 6.46 (3)	129 ± 19.0 (3)
GD 18	Amniotic Fluid Thallium Concentration (ng/ml)	BD	56.0 ± 5.62 (3)	265 ± 10.4 (3)
GD 18	Pooled Fetal Thallium Concentration (ng/g)	4.32 ± 4.04 (3) **	390 ± 45.0 (3) *	1860 ± 136 (3) **

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F0 Female: PND28 Biosample

Phase	Dose (mg/L)	0	3.13	6.25	12.5
LD 28	Adult Plasma Thallium Concentration (ng/ml)	0.196 ± 0.00567 (5) **	165 ± 11.1 (5) **	292 ± 29.0 (5) **	624 ± 26.5 (5) **
LD 28	Adult RBC Thallium Concentration (ng/ml)	BD	5.33 ± 0.683 (5)	8.13 ± 0.933 (5)	12.7 ± 1.17 (5)

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F0 Female: PND4 Biosample

Phase	Dose (mg/L)	0	6.25
LD 4	Adult Plasma Thallium Concentration (ng/ml)	0.162 ± 0.0337 (3)	214 ± 21.7 (3) *
LD 4	Adult RBC Thallium Concentration (ng/ml)	BD	13.0 ± 1.69 (3)

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LEGEND

Data are displayed as mean \pm SEM (N) except for pup concentration which is displayed as mean of litter means \pm SEM of litter means (number of litters).

GD – Gestation Day; LD – Lactation Day; PND – Postnatal Day

If over 20% of the animals in a group are above the limit of detection, then 1/2 the limit of detection value is substituted for values that are below the limit of detection.

BD - Group did not have over 20% of its values above the limit of detection.

When the control group did not have over 20% of its values above the limit of detection, no mean or standard error were calculated; no statistical analysis was done for the endpoint.

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests for all endpoints except pup concentrations. Pup PND 4 concentration analysis was performed using a bootstrapped Jonckheere trend test and pairwise comparisons were done using the Datta-Satten modified Wilcoxon test with Hommel adjustment for multiple comparisons.

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

* Statistically significant at $P \leq 0.05$

** Statistically significant at $P \leq 0.01$

**** END OF REPORT ****